

The Effects of Telepresence from a Web Site with a 3-D "Try-On" Model on Consumers' Attitudes Toward the Online Retailer

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There are many factors that influence Internet business success including level of product offerings, entertainment, customer service features, site navigation, and site design (e.g., Li, Daugherty, & Biocca, 2001; Lohse, Bellman, & Johnson, 2000). Included within site design are features affecting completeness of multi-sensory information about the product and consumer interactivity with the product image, both considered elements of telepresence (Shih, 1998). Telepresence, in the case of e-commerce, is how closely the computer-mediated experience simulates the consumer's real-world interaction with a product. Based on Sheridan's (1992) dimensions of presence, telepresence includes three dimensions: (1) extent of sensory information, (2) the ability to control the relation of one's sensors to the environmental stimulus (e.g., see a product's front and back), and (3) the ability to modify the physical environment. Shih (1998) proposed that higher telepresence in the virtual environment will lead consumers to spend more time, hold more positive attitudes, and show higher likelihood to revisit the virtual environment. There is empirical evidence (Fiore & Jin, 2003) that the ability to modify the physical environment (i.e., to mix and match apparel product images) of an online apparel retailer's Web site positively affects consumer approach responses (e.g., willingness to purchase from the site). The ability to simulate trying the product on one's body may also be an important interactive feature for apparel Web sites because consumers frequently state the inability to try on the product leads to hesitation to purchase apparel online (Abend, 2001). Finding no empirical study of this postulation, we explored in the present study the effect of telepresence from a 3-D "My Virtual Model" Web site feature, used by a number of major retailers (e.g., Lands' End), on approach responses towards the online retailer. This apparel try-on feature provided all three dimensions of telepresence.

Seventy-four undergraduate female students volunteered for our study where they used a site's 'My Virtual Model' feature to "try on" products they examined. Respondents used campus computers to examine the site for the same amount of time (10 minutes) to help control for load time and exposure effects. After exposure to the site, subjects completed a questionnaire. To tap telepresence, we developed five 9-point items measuring perception of how closely the simulated level of sensory product information and simulated ability to interact with the product approximated information and interactions with the real product at a bricks-and-mortar store. We created new and also revised established multi-item approach response measures. Cronbach's alpha scores for multi-item scales ranged from .87 to .93. Regression results ($p < .05$) support the significant influences of telepresence on consumer approach responses toward the online retailer. The telepresence variable predicted using the Web site, global attitude toward the online retailer, willingness to purchase online, willingness to recommend the online retailer, spending more time than planned, patronage of online retailer, and patronage of the retailer's bricks-and-mortar store. The present study shows the importance of try-on models and the concept of

telepresence to apparel retailers' Web site designs. These results have implications for online apparel retailers.

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